



1149819
 Los Nietos
 GROUNDWATER MONITORING REPORT
 LOS ANGELES REGION

June 16, 2000

Mr. Jimmie Woo
 Los Angeles Regional Water Quality Control Board
 320 West 4th Street, Suite 200
 Los Angeles, California 90013

Subject: Groundwater Monitoring Report, 1st Quarter 2000
 Los Nietos Business Center
 Santa Fe Springs, California
 Versar Project No. 4176-040
 SLIC Case No. 883

Dear Mr. Woo:

Versar, Inc. (Versar) is pleased to submit this quarterly groundwater monitoring report (1st quarter 2000) for the Los Nietos Business Center located at 9120 - 9169 South Norwalk Boulevard, and 11924 - 11933 East Los Nietos Road, in Santa Fe Springs, California (the Site). The location of the Site is depicted on Figure 1 (Attachment 1). The quarterly monitoring activities were performed as requested in the Los Angeles Regional Water Quality Control Board (RWQCB) letters dated November 4, 1999, December 16, 1999, and March 3, 2000.

Background

The Site is currently developed with four industrial warehouse buildings totaling 212,716 square feet of rentable space (see Figure 2, Attachment 1). Between 1924 and 1986, the Site was occupied and owned by Armco National Product Systems (Armco). Armco utilized the Site for manufacturing and testing down-hole crude oil production equipment. Prior to redevelopment of the Site in 1988, soils were remediated for residual total petroleum hydrocarbons (TPH) and metals. The remedial activities consisted of excavating approximately 10,000 cubic yards of soil for off-site disposal. The RWQCB granted no further action for soils in a letter dated December 16, 1999.

Six groundwater monitoring wells currently exist at the Site. Five of the wells (MW-1 through MW-5) were installed by Applied Geosciences in 1995. The sixth well (MW-6) was installed by Clayton Environmental Consultants (Clayton) in 1999. Groundwater samples were originally collected by Fugro West in 1996. Clayton performed three groundwater sampling events in 1999. Historical

Qms300.wpd/4176-040

• SACRAMENTO AREA OFFICE •

7844 MADISON AVENUE, SUITE 167 • FAIR OAKS, CA 95628 • TELEPHONE (916) 962-1612 FAX (916) 962-2678



Mr. Jimmie Woo
June 16, 2000
Page 2 of 4

groundwater results from the Site monitoring wells identified volatile organic compounds (VOCs) and metals above maximum contaminant levels (MCLs) for drinking water. Research performed by Clayton (September 29, 1999), and corroborated by Versar in January, 2000, identified numerous off-site (upgradient) sources of VOCs and metals in groundwater. Groundwater flow patterns and concentration gradients support on-site migration of VOCs and metals from off-site sources. In a letter dated November 4, 1999, the RWQCB acknowledge the likelihood that chemicals of concern are migrating on-site from off-site sources, but requested three additional quarters of groundwater monitoring to establish groundwater trends beneath the Site. The first of the three monitoring events was performed by Clayton in December 1999. The monitoring activities presented herein represents the second of the three requested monitoring events.

Scope of Work

The 1st quarter 2000 monitoring event was performed by Versar on March 22, 2000. The scope of work for the 1st quarter 2000 monitoring activities consisted of the following for each monitoring well: 1) collection of a depth to water measurement for determining the groundwater flow direction beneath the Site; and 2) collection of a groundwater sample for VOC and metals analyses. The methodology used for groundwater sampling and analysis is described in Attachment 2 to this letter report. Field measurements collected during monitoring well sampling are included in Attachment 3.

Groundwater Flow

The groundwater flow patterns calculated from the depth to water measurements from the 1st quarter 2000 monitoring event are depicted on Figure 3 (Attachment 1). Groundwater elevation data is presented in Table 1 (Attachment 1). As shown on Figure 3, the groundwater flow direction during this monitoring event was to the south/southwest. The flow direction calculated previously by Clayton was to the west/southwest, as depicted in Clayton's January 25, 2000 report *4th Quarter 1999 - Groundwater Monitoring Results*.

Mr. Jimmie Woo

June 16, 2000

Page 3 of 4

Groundwater Analytical Results

Groundwater analytical results from the 1st quarter 2000 monitoring event, along with historical analytical results, are tabulated in Tables 2 and 3 (Attachment 1). Table 2 presents current and historical groundwater analytical results for VOCs. Table 3 presents current and historical groundwater analytical results for metals. Laboratory analytical data sheets for the 1st quarter 2000 monitoring event are included in Attachment 4. Per your request, Isocentration contours for tetrachloroethene (PCE), trichloroethene (TCE), total chromium, and hexavalent chromium are depicted on Figures 4, 5, 6, and 7, respectively.

As indicated in Table 2, low levels of VOCs are present in groundwater, which is consistent with historical analytical results. Select VOCs are present above the California Maximum Contaminant Levels (MCLs) for drinking water. As depicted on Figures 4 and 5, the data indicates that PCE and TCE are migrating on-site from one or more off-site sources. PCE appears to be migrating onto the Site from the northeast, while TCE appears to be migrating onto the Site from the east. This is consistent with historical research performed for off-site releases located upgradient of the Site, as described in Clayton's September 29, 1999 letter. These release sites include Phibro Tech, Pilot Chemical, Techni Braze, Burdette Oxygen/Liquid Air, and the former Diversey Wyandotte.

As indicated in Table 3, various metals were identified in the 1st quarter 2000 groundwater samples. With the exception of total chromium, hexavalent chromium, antimony, and cadmium, the current analytical results are below California Maximum Contaminant Levels (MCLs) for drinking water. Historical analytical results from the Site indicate antimony and cadmium are not consistently detected in Site groundwater. As depicted on Figures 6 and 7, the data indicates total chromium and hexavalent chromium are migrating on-site from one or more off-site sources. Versar's historical research identified elevated concentrations of total chromium in groundwater at the Phibro Tech facility, located northeast (upgradient) from the Site. A 1996 groundwater sample from the Phibro Tech facility identified chromium at a concentration of 50 milligrams per liter (mg/l), which significantly exceeds concentrations identified on-site.



Mr. Jimmie Woo
June 16, 2000
Page 4 of 4

Closing

Based on the groundwater analytical results collected to date, it is Versar's opinion that VOCs and metals are migrating on-site from one or more off-site sources, and the concentrations identified in groundwater do not pose a threat to Site users under a commercial/industrial setting. The final Site groundwater monitoring event is scheduled to occur during the last week of June, 2000.

If you have any questions regarding the information presented herein, please call Mr. Scott Allin at (916) 863-9325.

Sincerely,
Versar, Inc.

A handwritten signature in black ink, appearing to read "S. Allin".

Scott Allin, R.E.A.
Senior Program Manager

A handwritten signature in black ink, appearing to read "T. Berger".

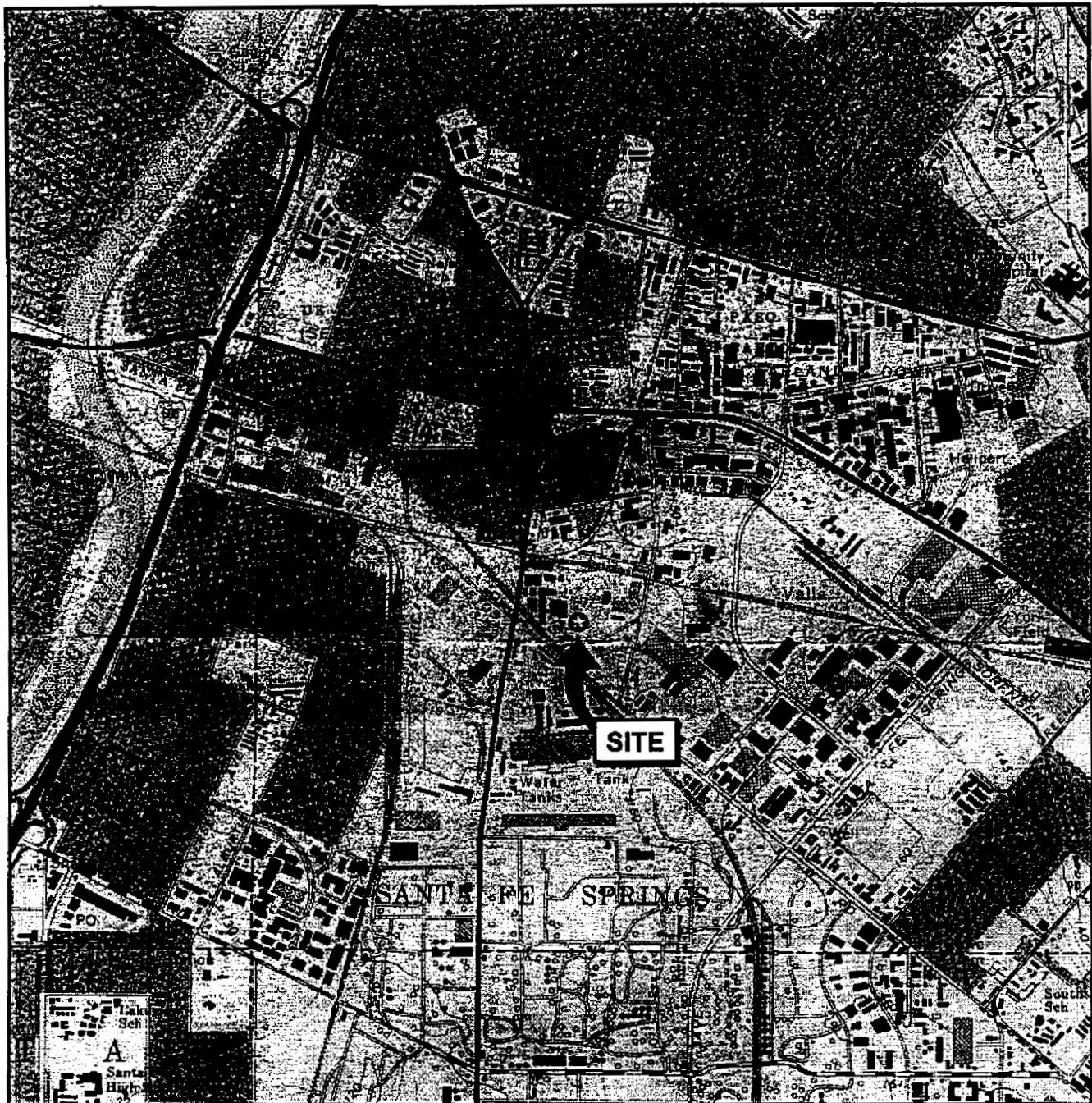
Tim Berger, R.G.
Supervising Geologist

cc: Steve Campbell (AMB Property Corporation)

Attachment 1 - Figures and Tables
Attachment 2 - Monitoring Methodology
Attachment 3 - Monitoring Field Measurements
Attachment 4 - Groundwater Analytical Results

ATTACHMENT 1

Figures and Tables



Source: USGS 7.5 Minute Series Whittier, California Quadrangle, 1965 Photorevised 1981.



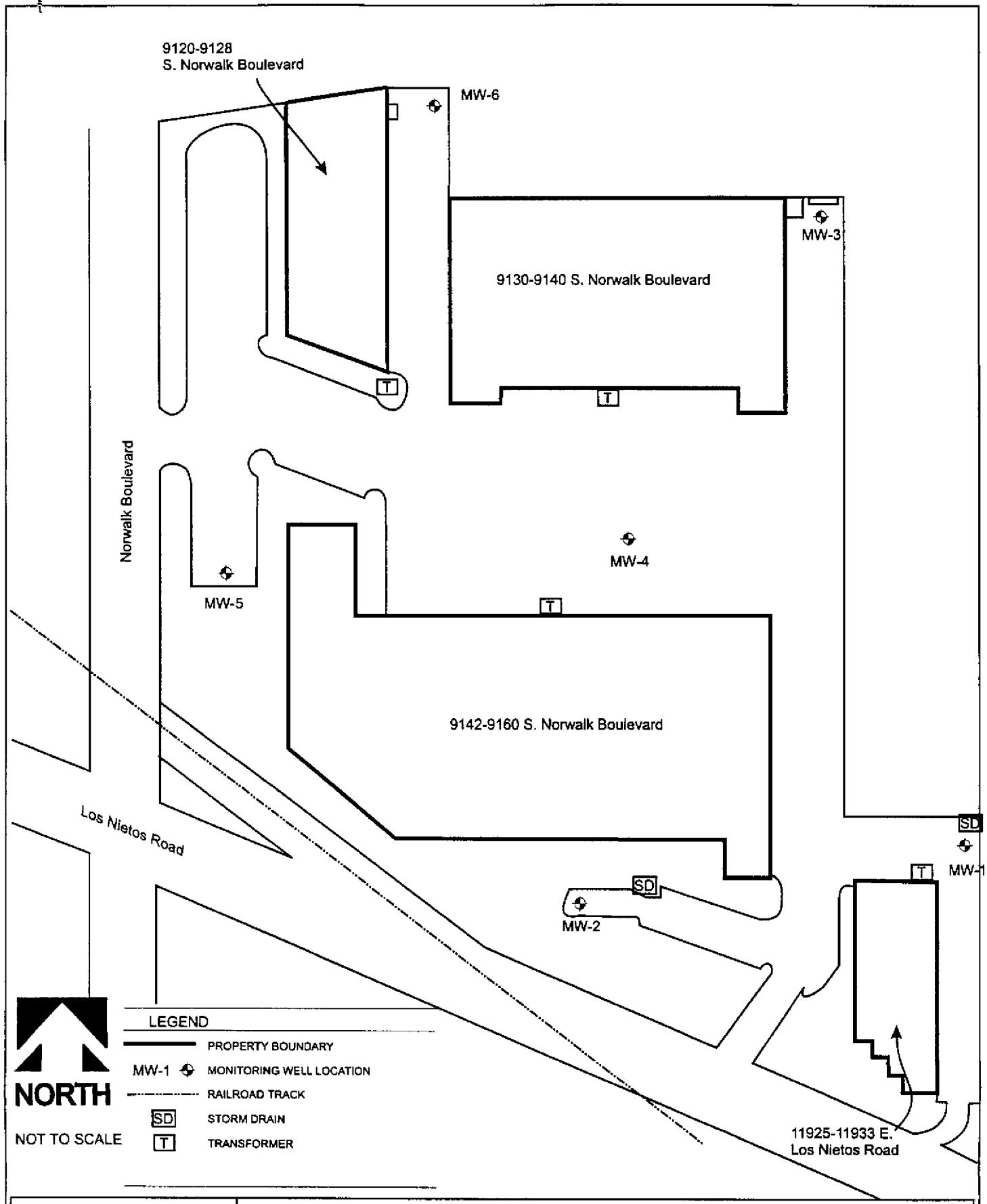
0' SCALE 2000'

Dr. By: AEC
Date: 10/29/99
Versar Project No.: 4176-040

Versar, Inc.
7844 Madison Avenue
Suite 167
Fair Oaks, CA 95628
(916) 962-1612

SITE LOCATION MAP
Los Nietos Business Center
9120-9160 South Norwalk Boulevard
Santa Fe Springs, California

Figure
1

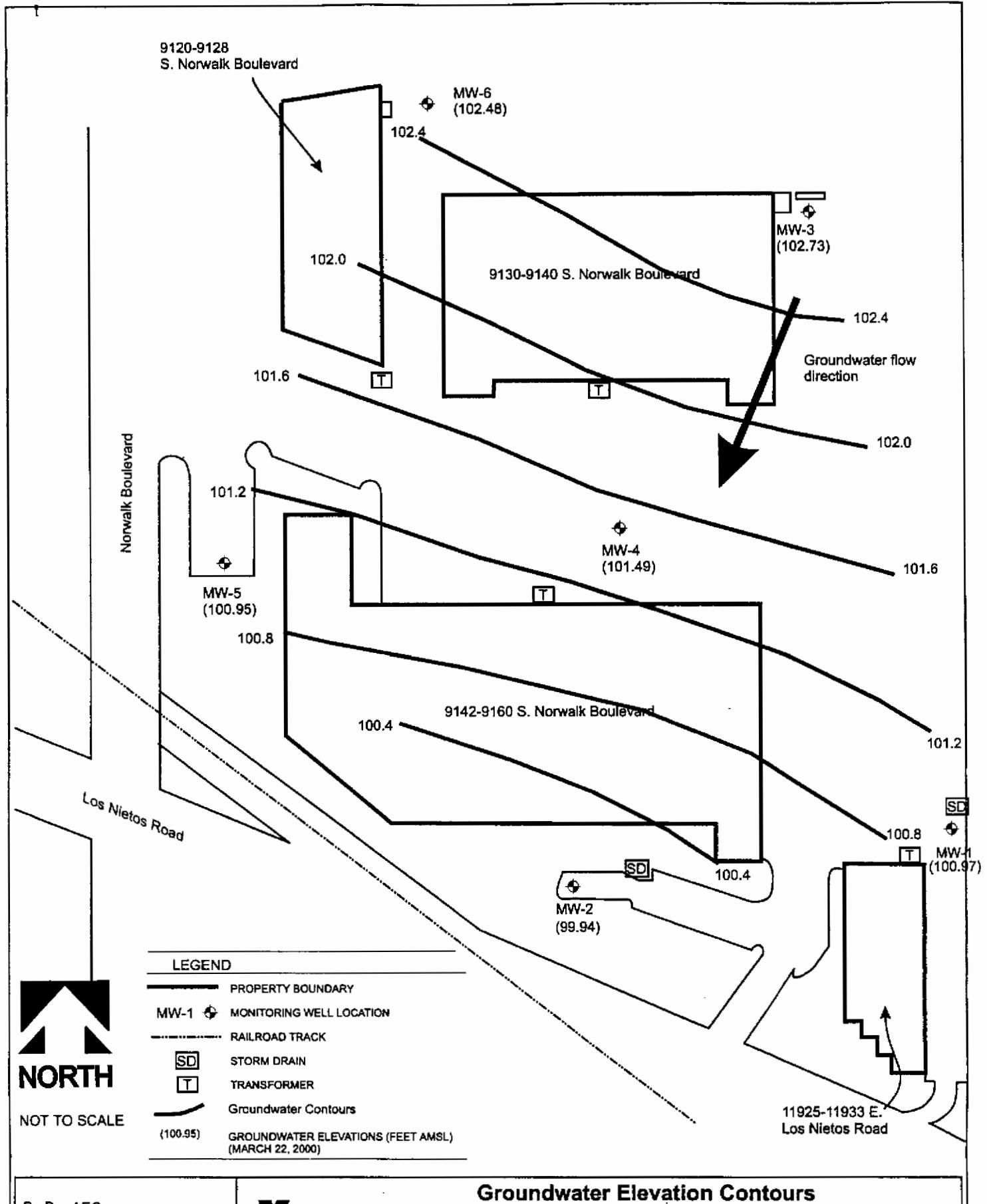


Dr. By: AEC
Date: 11/08/99
Versar Project No.: 4176-040

Versar NC
7844 Madison Avenue
Suite 167
Fair Oaks, CA 95628
(916) 962-1612

SITE LAYOUT MAP
Los Nietos Business Center
9120-9160 South Norwalk Boulevard
Santa Fe Springs, California

Figure 2

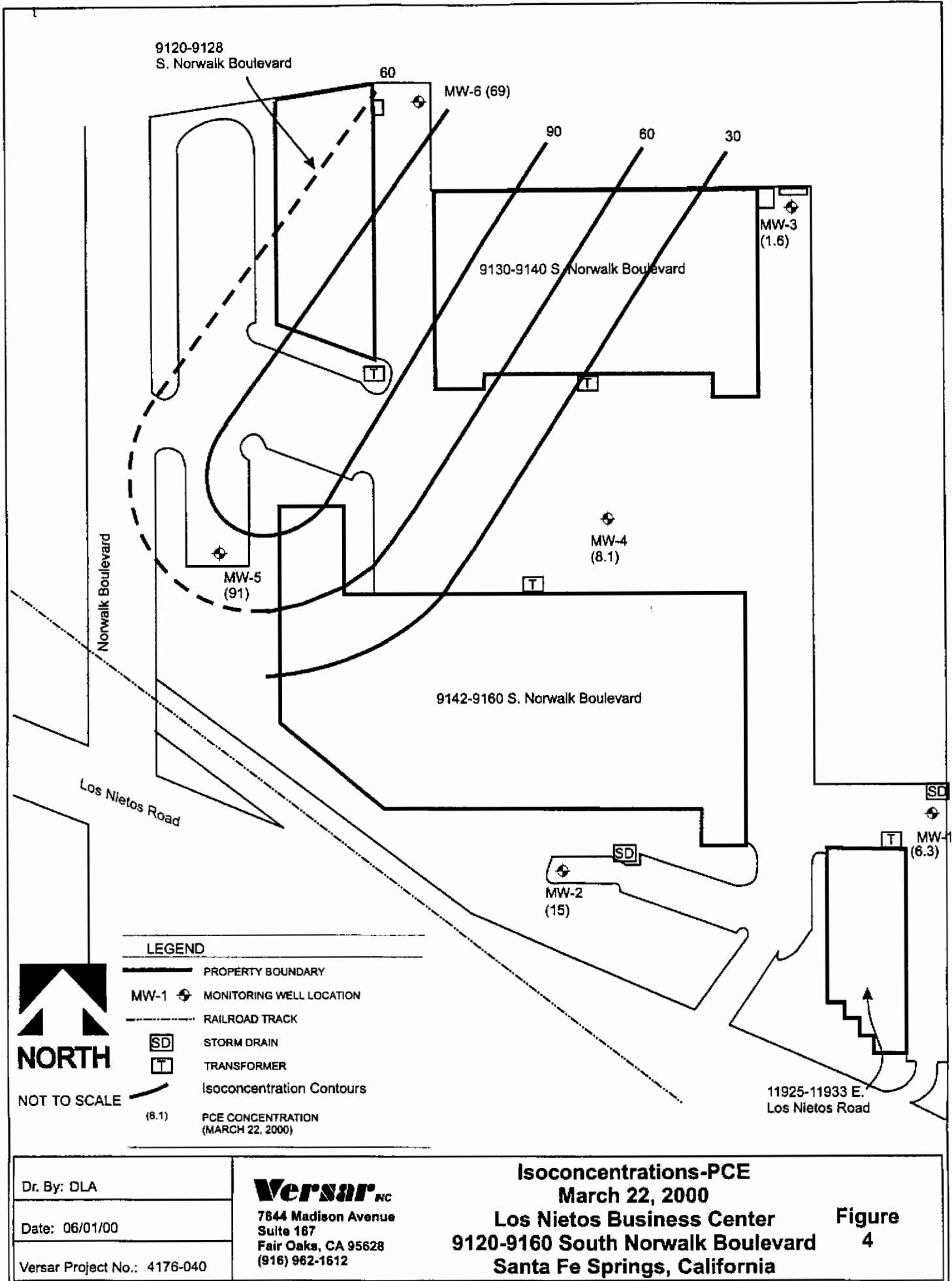


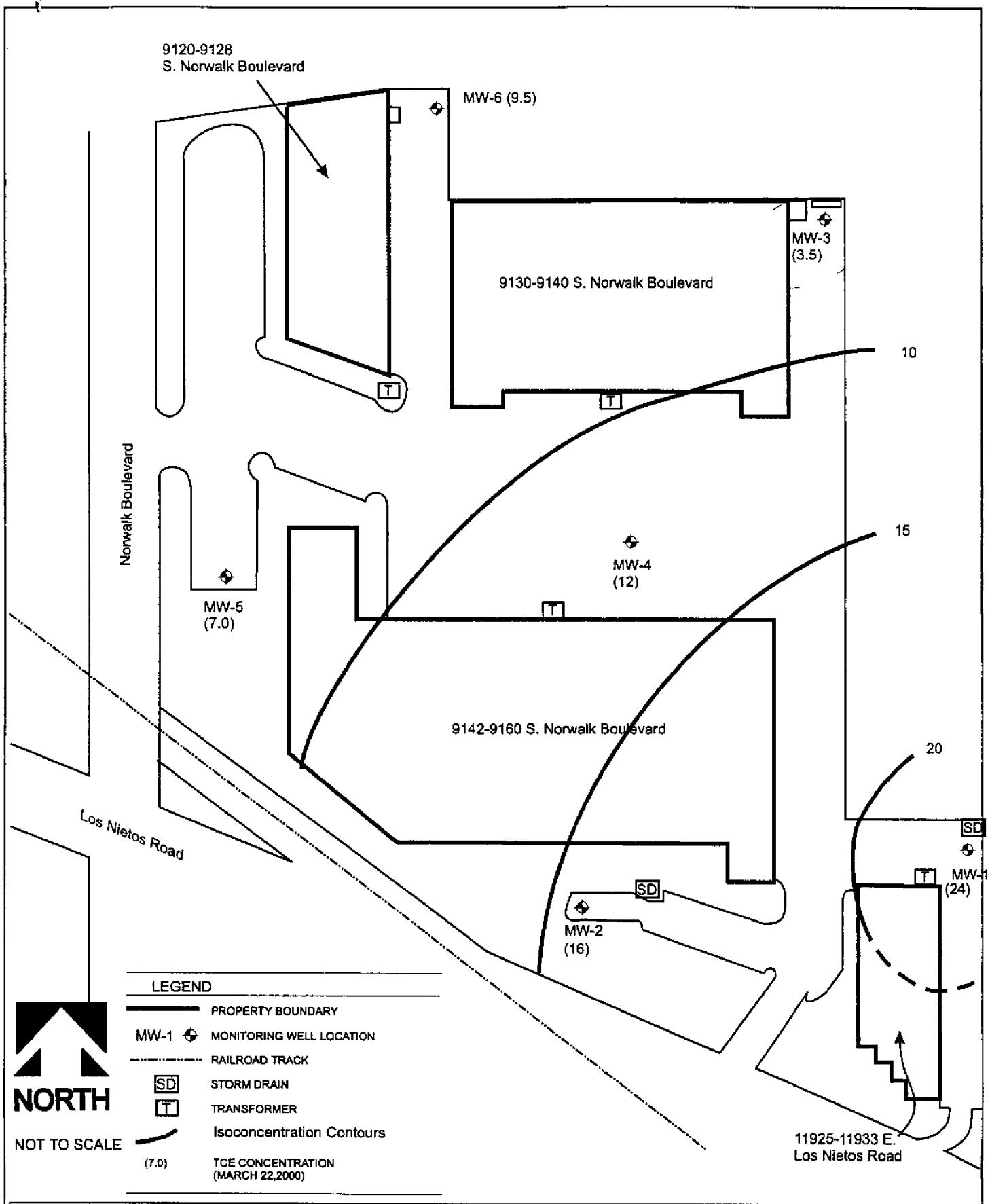
Dr. By: AEC
Date: 06/01/00
Versar Project No.: 4176-040

Versar
INC
7844 Madison Avenue
Suite 167
Fair Oaks, CA 95628
(916) 982-1612

Groundwater Elevation Contours
March 22, 2000
Los Nietos Business Center
9120-9160 South Norwalk Boulevard
Santa Fe Springs, California

Figure
3



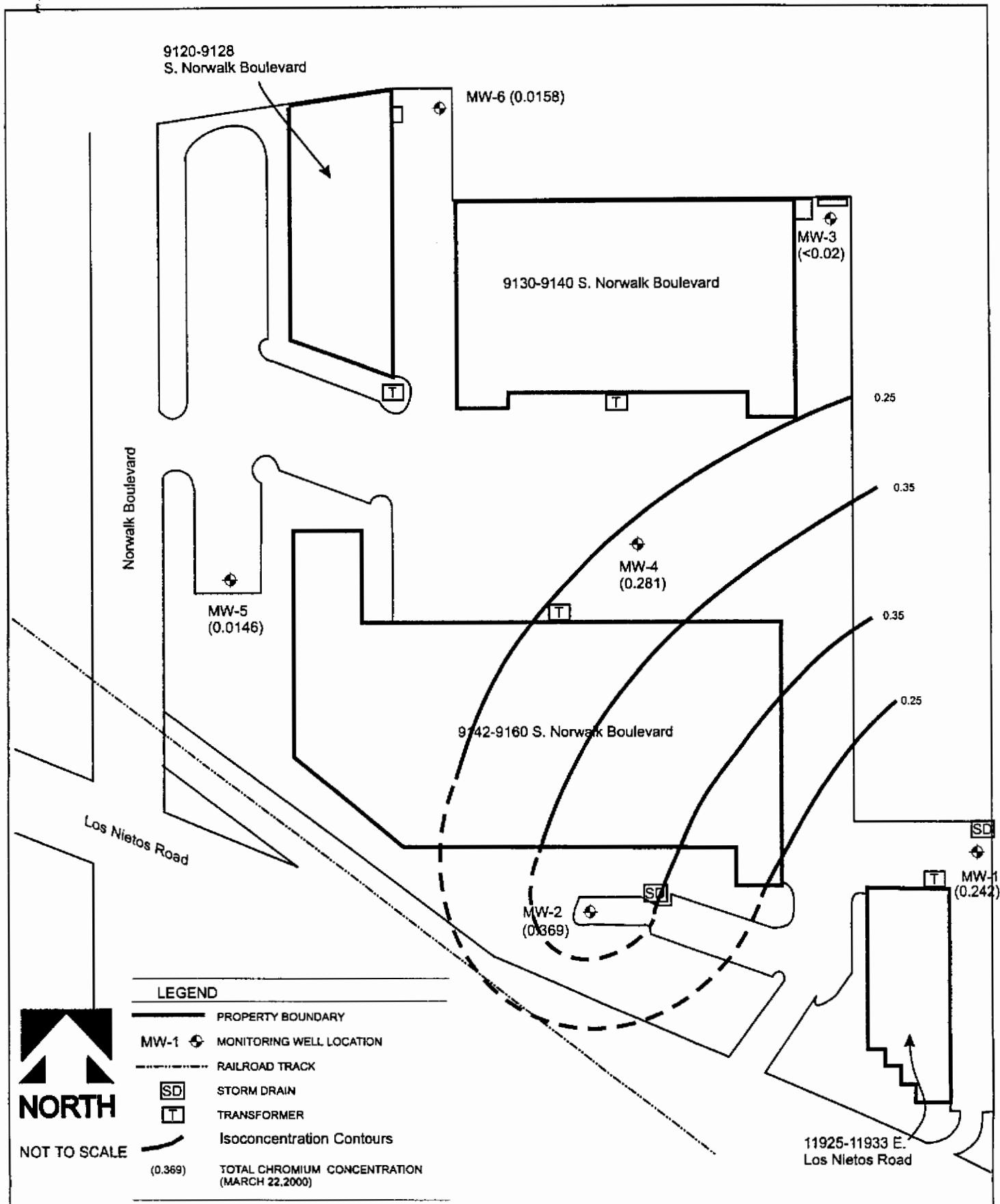


Dr. By: DLA
Date: 06/01/00
Versar Project No.: 4176-040

Versar NC
7844 Madison Avenue
Suite 167
Fair Oaks, CA 95628
(916) 962-1612

Isoconcentrations-TCE
March 22, 2000
Los Nietos Business Center
9120-9160 South Norwalk Boulevard
Santa Fe Springs, California

**Figure
5**



Dr. By: DLA
Date: 06/01/00
Versar Project No.: 4176-040

Versar Inc
 7844 Madison Avenue
 Suite 167
 Fair Oaks, CA 95628
 (916) 962-1612

Isoconcentrations-Total Chromium
 March 22, 2000
 Los Nietos Business Center
 9120-9160 South Norwalk Boulevard
 Santa Fe Springs, California

Figure
 6

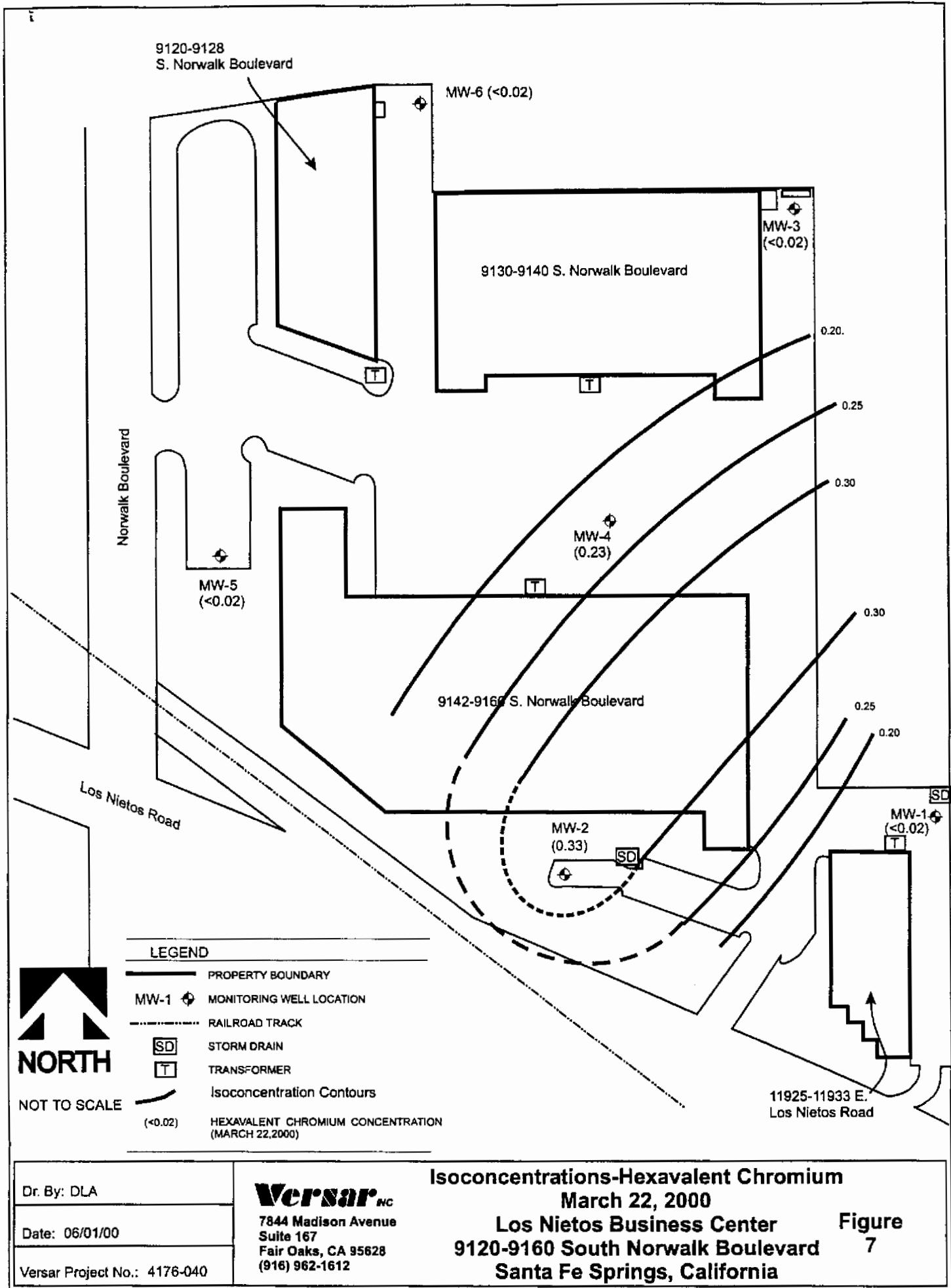


Table 1
Groundwater Elevation Data
Los Nietos Business Center
Santa Fe Springs, California

		Groundwater Monitoring Well						Groundwater Flow direction
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	
Well casing elevation (feet amsl)		150.42	153.99	149.98	149.94	155.22	156.03	---
Total Depth of Well		68.45	66.25	68.15	68.20	65.95	47.85	
December, 1999	Depth to groundwater (feet toc)	51.05	56.72	50.40	51.54	58.05	47.45	West/Southwest
	Groundwater elevation (feet amsl)	99.37	97.27	99.58	98.40	97.17	108.58	
March 22, 2000	Depth to groundwater (feet toc)	49.45	54.05	47.25	48.45	54.27	53.55	South/Southwest
	Groundwater elevation (feet amsl)	100.97	99.94	102.73	101.49	100.95	102.48	
Change from previous elevation		1.60	2.67	3.15	3.09	3.78	-6.10	

Notes and Abbreviations:

ft/ft = feet per foot

amsl = above mean sea level

toc = top of casing

2076-01/4422-002/FEB25'00

Table 2
Groundwater Analytical Results, Volatile Organic Compounds
Los Nietos Business Center
Santa Fe Springs, California

Monitoring Well No.	Date	Chemicals of Concern (Micrograms Per Liter)										
		CTC	Chloroform	1,1-DCA	1,2-DCA	1,1-DCE	trans-1,2-DCE	cis-1,2-DCE	1,2-DCP	PCE	1,1,1-TCA	TCE
MW-1	Apr-96	ND	0.61	21	ND	11	ND	ND	ND	6.3	4.2	32
	Jul-99	ND	ND	2.6	ND	18.6	ND	ND	--	11.8	ND	11.3
	Sep-99	ND	1.4	3.4	ND	25.6	ND	ND	ND	11.4	1.9	10.9
	Dec-99	ND	12	61	ND	1,030	ND	ND	172	ND	29	151
	Mar-00	0.59	1.7	7.4	0.53	81	ND	1.7	29	6.3	3.2	24
MW-2	Apr-96	ND	0.91	ND	ND	1.1	ND	ND	--	15	ND	7.7
	Jul-99	ND	1.0	2.2	6.8	ND	ND	1.4	--	10.1	ND	5.5
	Sep-99	ND	ND	4.6	6.2	2.5	ND	2.3	--	15.9	ND	7.7
	Dec-99	1.2	7.3	11.4	13.8	6.9	ND	3.7	ND	15.4	ND	18.9
	Mar-00	2.2	11	4.9	4.1	2.9	ND	1.2	ND	15	ND	16
MW-3	Apr-96	ND	ND	ND	ND	ND	ND	ND	--	1.4	ND	2.6
	Jul-99	ND	ND	ND	ND	ND	ND	ND	--	ND	ND	ND
	Sep-99	ND	ND	ND	ND	ND	ND	ND	--	ND	ND	ND
	Dec-99	ND	ND	3.8	ND	4.9	ND	ND	ND	2.3	ND	3.2
	Mar-00	ND	ND	1.6	ND	1.7	ND	ND	ND	1.6	ND	3.5
MW-4	Apr-96	5.1	15	33	17	13	0.51	10	--	18	ND	74
	Jul-99	ND	2.4	3.0	ND	1.6	ND	ND	--	8.7	ND	12.2
	Sep-99	ND	4.4	4.3	3.9	3.1	ND	1.1	--	17.5	ND	13.2
	Dec-99	ND	7.2	4.7	2.3	3.2	ND	1.0	ND	11.1	ND	12.7
	Mar-00	0.58	4.8	3.5	1.8	3.6	ND	ND	ND	8.1	ND	12
MW-5	Apr-96	ND	0.76	ND	ND	ND	ND	ND	--	82	ND	78
	Jul-99	ND	ND	ND	ND	2.1	ND	ND	--	73.8	ND	5.0
	Sep-99	ND	ND	ND	ND	2.0	ND	ND	--	81.1	ND	4.8
	Dec-99	ND	ND	ND	ND	2.1	ND	ND	ND	89.5	--	8.3
	Mar-00	ND	ND	ND	ND	2.3	ND	ND	ND	91	ND	7
MW-6	Sep-99	ND	ND	ND	ND	ND	1.9	ND	--	68.2	ND	6.9
	Dec-99	ND	ND	ND	ND	2.1	ND	ND	ND	70.3	ND	12.9
	Mar-00	ND	ND	ND	ND	2.1	ND	ND	ND	69	ND	9.5
Ca MCL		0.5	100	5	0.5	6.0	10	6.0	5.0	5.0	200	5.0

Notes and Abbreviations:

CTC - Carbon Tetrachloride.

1,1-DCE - 1,1-dichloroethene.

1,2-DCP - 1,2-dichloropropane.

TCE - trichloroethene.

1,1-DCA - 1,1-dichloroethane.

trans-1,1-DCE - trans-1,1-dichloroethene.

PCE - tetrachloroethene.

Ca MCL - California Maximum Contaminant Level.

1,2-DCA - 1,2-dichloroethane.

cis-1,2-DCE - cis-1,2-dichloroethene.

1,1,1-TCA - 1,1,1-trichloroethane.

-- - not analysed

ND - not detected at or above the methods reporting limit. VOCs not presented were below the laboratory reporting limits.

Table 3
Groundwater Analytical Results, Metals
Los Nietos Business Center
Santa Fe Springs, California

Monitoring Well No.	Date	Chemicals of Concern (Milligrams Per Liter)																		
		Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Ti	V	Zn	Cr+6	
MW-1	Apr-96	ND	ND	0.2	ND	ND	0.047	ND	ND	ND	ND	ND	0.013	ND	ND	0.12	0.069	—	—	
	Jul-99	ND	ND	0.051	ND	ND	ND	ND	ND	ND	ND	ND	0.015	ND	ND	ND	0.065	—	—	
	Sep-99	ND	ND	0.058	ND	ND	ND	ND	ND	ND	ND	0.014	0.068	ND	0.15	ND	0.055	—	—	
	Dec-99	ND	ND	0.059	ND	0.021	ND	ND	ND	ND	ND	0.017	ND	ND	ND	ND	ND	—	—	
	Mar-00	ND	ND	0.0724	ND	ND	0.0242	ND	0.00949	ND	ND	ND	0.0128	ND	ND	ND	0.00778	0.0735	ND	—
MW-2	Apr-96	ND	ND	0.11	ND	ND	0.07	ND	ND	ND	0.0068	ND	ND	ND	ND	0.12	ND	—	—	
	Jul-99	ND	ND	0.045	ND	ND	0.027	ND	ND	ND	ND	ND	0.018	ND	0.019	ND	0.103	—	—	
	Sep-99	ND	ND	0.037	ND	ND	0.024	ND	ND	ND	ND	ND	0.071	ND	0.162	ND	0.096	—	—	
	Dec-99	ND	ND	0.043	ND	ND	0.188	ND	0.02	ND	ND	ND	0.016	ND	ND	ND	ND	0.015	—	
	Mar-00	0.0167	ND	0.0872	ND	ND	0.369	ND	0.00743	ND	0.00167	ND	0.00526	ND	ND	ND	0.00917	0.0546	0.33	
MW-3	Apr-96	ND	ND	0.094	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12	ND	—	—	
	Jul-99	ND	ND	0.107	ND	ND	ND	ND	ND	ND	ND	ND	0.014	ND	ND	ND	0.091	—	—	
	Sep-99	ND	ND	0.096	ND	ND	ND	ND	ND	ND	ND	ND	0.016	0.083	ND	0.176	ND	0.052	—	
	Dec-99	ND	ND	0.072	ND	ND	0.011	ND	0.019	ND	ND	ND	0.012	ND	ND	ND	ND	0.012	—	
	Mar-00	ND	ND	0.0616	ND	ND	0.0161	ND	0.00517	ND	ND	ND	0.00559	ND	ND	ND	ND	0.0485	ND	—
MW-4	Apr-96	ND	ND	0.096	ND	0.062	ND	ND	0.062	ND	0.0016	ND	0.15	ND	0.064	ND	0.16	0.66	—	—
	Jul-99	ND	ND	0.057	ND	ND	0.036	ND	ND	ND	ND	ND	0.014	0.015	ND	0.015	ND	0.097	—	—
	Sep-99	ND	ND	0.037	ND	ND	0.163	ND	0.16	ND	ND	ND	0.02	0.056	ND	0.143	ND	0.231	—	—
	Dec-99	ND	ND	0.031	ND	ND	0.606	ND	0.02	0.009	ND	ND	0.13	ND	ND	ND	ND	0.065	—	—
	Mar-00	ND	ND	0.0447	ND	0.00954	0.261	ND	0.0244	ND	ND	ND	0.0180	ND	ND	ND	ND	0.124	0.23	—
MW-5	Apr-96	ND	ND	0.062	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.058	—	—
	Jul-99	ND	ND	0.047	ND	ND	ND	0.013	ND	ND	ND	ND	0.014	0.065	ND	0.141	ND	ND	—	—
	Sep-99	ND	ND	0.058	ND	ND	ND	ND	ND	ND	ND	ND	0.013	0.013	ND	ND	ND	ND	—	—
	Dec-99	ND	ND	0.044	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0331	ND	—
	Mar-00	ND	ND	0.0521	ND	ND	0.0146	ND	0.00557	ND	ND	ND	ND	ND	ND	ND	ND	ND	—	—
MW-6	Sep-99	ND	ND	0.04	ND	ND	ND	ND	ND	ND	ND	0.016	0.056	ND	ND	0.128	ND	—	—	—
	Dec-99	ND	ND	0.041	ND	ND	ND	0.0158	ND	0.0119	ND	ND	0.012	ND	ND	ND	ND	0.0976	ND	—
	Mar-00	ND	ND	0.105	ND	ND	ND	ND	ND	ND	ND	0.00638	ND	ND	ND	ND	0.0138	ND	—	—
Ca MCL		0.006	0.05	1	0.004	0.005	0.05	--	1.0	0.015	0.002	--	0.1	0.05	0.1	0.002	--	--	0.05	

Notes and Abbreviations:

St - Antimony	Ba - Beryllium	Co - Cobalt	Hg - Mercury	Se - Selenium	V - Vanadium
As - Arsenic	Cd - Cadmium	Cu - Copper	Mo - Molybdenum	Ag - Silver	Zn - Zinc
Ba - Barium	Cr - Chromium (tot.)	Pb - Lead	Ni - Nickel	Tl - Thallium	Cr+6 - Hexavalent Chromium

ND - Not detected at or above the method reporting limits.

-- - Not analyzed or not available.

ATTACHMENT 2

Monitoring Methodology

1.0 DECONTAMINATION PROCEDURES

The decontamination procedures for non-dedicated field equipment and well development/purging equipment are given below. These procedures are followed during all field activities.

- a. Non-dedicated well development, purging, and sampling equipment is carefully pre-cleaned prior to each use, as follows:
 - a. Carefully brush off any loose foreign debris with a soft bristle brush.
 - b. Rinse the equipment thoroughly in clean water.
 - c. Wash the equipment in a non-phosphate detergent bath.
 - d. Rinse thoroughly in clean water.
 - e. Rinse thoroughly with deionized water.
 - f. Air dry in a dust-free environment.
 - g. Store in unused plastic bags or other suitable cover until use.
2. Clean disposable gloves are worn by all field personnel when handling decontaminated equipment.

2.0 COLLECTION OF SAMPLES

2.1 Groundwater Sampling

Groundwater samples are collected for laboratory analysis using the procedures given below.

1. Open the well and measure the organic vapor concentration with a flame-ionization detector (FID) or photoionization detector (PID).
2. Measure the water levels (if any) in the well using a decontaminated measuring device. All measurements must be made to the nearest 0.01 foot, and measured relative to the top of the casing. Record the depth of the water in the field data sheets.
3. Inspect the disposable bailer to ensure that the bottom valve assembly is working correctly.

4. Begin purging the well by inserting a bailer into the PVC monitoring well casing and carefully lower it into the well. Take care to avoid agitating and aerating the fluid column in the well. If a centrifugal or submersible pump is used, begin by connecting new or dedicated polyethylene tubing to the pump intake and inserting the remaining tubing in the well so that water is drawn from within two feet of the static water level. The centrifugal pump should be placed a minimum of 10 feet downwind of well. Parameter samples can be collected from the sample port located at the pump discharge port. A steady pumping rate should be set that avoids excessive or rapid drawdown in the well.
5. Slowly withdraw the bailer and transfer the water samples to a sampling container.
6. Measure the temperature, pH, conductivity, and turbidity. Record these and all subsequent measurements in the field data sheets.
7. Continue purging the well (a minimum of three well volumes) until the temperature, pH, conductivity, and turbidity have stabilized, or the well is dry.
8. When the water has recovered to 80 percent of the original level, carefully lower a new disposable bailer into the well and recover groundwater samples.
9. Fill the appropriate sample containers by releasing water from the bailer via the bottom emptying device with a minimum of agitation. The most volatile parameters are collected first, proceeding to the least volatile parameters.
10. Place the purge water in a DOT-approved 55-gallon drums.

3.0 ANALYSIS OF SAMPLES

Samples are submitted to a California state-certified laboratory (Calscience Environmental Laboratories, Inc.) for analysis. Each groundwater sample was analyzed for VOCs by EPA method 8260B, metals by EPA Method 6000/7000 series, and hexavalent chromium by EPA Method 7196A.

4.0 SAMPLE HANDLING

4.1 Sample Containers, Preservation, and Holding Times

All samples are collected, placed in containers, preserved, and analyzed within the time constraints with applicable local, provincial, and federal procedures. All sample containers are precleaned in accordance with prescribed EPA methods. A custody seal is placed around all

sample container lids to prevent leaks and unauthorized tampering with individual samples following collection and prior to the time of analysis.

4.2 Sample Tracking and Management

All samples are tracked using a standard chain-of-custody form. The chain of custody record includes the following information:

1. Sample number
2. Signature of collector
3. Date and time of collection
4. Sample collection location
5. Sample type
6. Signature of persons involved in the chain-of-possession
7. Inclusive dates of possession
8. Analytical parameters
9. Pertinent field observations

The custody record is completed using waterproof ink. Corrections are made by drawing a line through, initialing the error, and then entering the correct information.

Custody of the samples begins at the time of sample collection and are maintained by the sampling team supervisor until samples are relinquished for shipment to the laboratory, or until samples are hand-delivered to the designated laboratory sample custodian. Partial sample sets being accumulated for hand-delivery to the laboratory are stored in coolers with chain-of-custody records sealed in plastic bags and placed in the cooler with the sample sets.

ATTACHMENT 3

Monitoring Field Measurements

MONITORING WELL DEVELOPMENT TABLE

MONITORING WELL DEVELOPMENT TABLE

Project Number:	00-481-2	Site Name:	Los Rios			
Well Number:	MW2	Date(s) Developed:	3-22-00			
OVA - Ambient:		Development Method:	Bailer			
OVA - Vault:		Development Rate:	1 gpm			
OVA - Casing:		Developed By:	KS			
Water Level - Initial:	54.05 @ 1:57 pm	Free Product:	none			
Water Level - Final:	54.1 @ 2:35 pm	Sheen:	none			
Well Depth:	265	Odor:	none			
Well Diameter:	4 inch	Well Casing Volume:	7			
Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pH	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Turbidity
2:10	5	70.3	5.54	1.96	—	High
2:18	10	69.9	5.48	1.99	—	High
2:25	15	69.8	5.8	1.94	—	High
2:40	20	69.9	5.8	1.89	—	High
Sampled @ 4:00 Water level 54.05						
4.00		71.0	5.88	1.9	Clean	
Field Notes: too turbid/deep to use purge pump						

MONITORING WELL DEVELOPMENT TABLE

Project Number:	00-481-2						Site Name:	Los Nietos Business Park		
Well Number:	MW 3						Date(s) Developed:	3/22		
OVA - Ambient:							Development Method:	Purge Pump - 12V DC		
OVA - Vault:							Development Rate:	$\approx \frac{1}{2}$ gallon per minute		
OVA - Casing:							Developed By:	ICS		
Water Level - Initial:	47.25' @ 8:35						Free Product:	none		
Water Level - Final:	47.5' @ 10:10						Sheen:	none		
Well Depth:	265'						Odor:	none		
Well Diameter:	4"						Well Casing Volume:	12 gallons		
Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pH	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Turbidity				
8:45	2 gallons	66.6	6.50	1.67	—	clear				
9:00	10 gallons	67.5	6.55	1.53	—	clear				
9:10	15 gallons	68.0	6.41	1.53	—	clear				
9:30	22 gallons	66.7	6.18	1.47	—	clear				
9:45	25 gallons	67.0	6.00	1.51	—	clear				
10:10	35 gallons	67.8	6.08	1.52	—	clear				
	Sampled at 3:05 water level 47.20									
3:05		70.1	6.2	1.7	—	clear				
Field Notes:	$18 \times .66 = 11.88 \times 3 = 35 \text{ gallons}$						Depth to water during pumping = 47.7 feet			

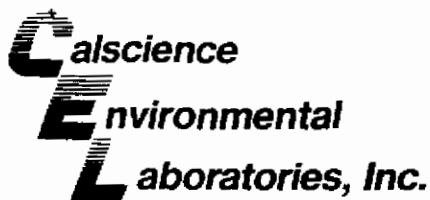
MONITORING WELL DEVELOPMENT TABLE

MONITORING WELL DEVELOPMENT TABLE

MONITORING WELL DEVELOPMENT TABLE

ATTACHMENT 4

Groundwater Analytical Results



March 28, 2000

Kevin Sheridan
Coast Environmental Services
9401 Gateshead Drive
Huntington Beach, CA 92646

Subject: Calscience Work Order No.: 00-03-0795
Client Reference: Los Nietos Business Center

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 03/22/00 and analyzed in accordance with the attached chain-of-custody.

The results in this analytical report are limited to the samples tested and any reproduction of this report must be made in its entirety.

If you have any questions regarding this report, require sampling supplies or field services, or information on our analytical services, please feel free to call me at (714) 895-5494.

Sincerely,

A handwritten signature in black ink that reads "Jody McInerney".
Calscience Environmental
Laboratories, Inc.
Jody McInerney
Project Manager

A handwritten signature in black ink that reads "William H. Christensen".

William H. Christensen
Quality Assurance Manager



ANALYTICAL REPORT

Coast Environmental Services
9401 Gateshead Drive
Huntington Beach, CA 92646

Date Received: 03/22/00
Work Order No: 00-03-0795
Preparation: Total Digestion
Method: EPA 6010B / EPA 7470A

Project: Los Nietos Business Center

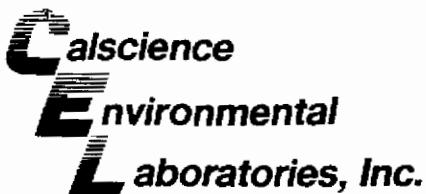
Page 1 of 3

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:					
MW-6	00-03-0796-1	03/22/00	Aqueous	03/23/00	03/24/00	000323lcs4					
Comment(s): Mercury was analyzed on 3/23/00 16:52:25 with batch 000323lcs2											
Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.0150	1		mg/L	Mercury	ND	0.00050	1		mg/L
Arsenic	ND	0.0150	1		mg/L	Molybdenum	ND	0.00500	1		mg/L
Barium	0.105	0.010	1		mg/L	Nickel	0.00638	0.00500	1		mg/L
Beryllium	ND	0.00100	1		mg/L	Selenium	ND	0.0150	1		mg/L
Cadmium	ND	0.00500	1		mg/L	Silver	ND	0.00500	1		mg/L
Chromium (Total)	0.0158	0.0050	1		mg/L	Thallium	ND	0.0150	1		mg/L
Cobalt	ND	0.00500	1		mg/L	Vanadium	0.0138	0.0050	1		mg/L
Copper	0.0119	0.0050	1		mg/L	Zinc	0.0976	0.0100	1		mg/L
Lead	ND	0.0100	1		mg/L						

MW-3	00-03-0795-2			03/22/00		Aqueous	03/23/00		03/24/00		0003231cs4
Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.0150	1		mg/L	Mercury	ND	0.00050	1		mg/L
Arsenic	ND	0.0150	1		mg/L	Molybdenum	ND	0.00500	1		mg/L
Barium	0.0616	0.0100	1		mg/L	Nickel	0.00559	0.00500	1		mg/L
Beryllium	ND	0.00100	1		mg/L	Selenium	ND	0.0150	1		mg/L
Cadmium	ND	0.00500	1		mg/L	Silver	ND	0.00500	1		mg/L
Chromium (Total)	0.0161	0.0050	1		mg/L	Thallium	ND	0.0150	1		mg/L
Cobalt	ND	0.00500	1		mg/L	Vanadium	ND	0.00500	1		mg/L
Copper	0.00517	0.00500	1		mg/L	Zinc	0.0485	0.0100	1		mg/L
Lead	ND	0.0100	1		mg/L						

MW-1	00-03-0796-3	03/22/00	Aqueous	03/23/00	03/24/00	0003231cs4					
Comment(s): Mercury was analyzed on 3/23/00 17:10:26 with batch 0003231cs2											
Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.0150	1		mg/L	Mercury	ND	0.00050	1		mg/L
Arsenic	ND	0.0150	1		mg/L	Molybdenum	ND	0.00500	1		mg/L
Barium	0.0724	0.0100	1		mg/L	Nickel	0.0128	0.0050	1		mg/L
Beryllium	ND	0.00100	1		mg/L	Selenium	ND	0.0150	1		mg/L
Cadmium	ND	0.00500	1		mg/L	Silver	ND	0.00500	1		mg/L
Chromium (Total)	0.0242	0.0050	1		mg/L	Thallium	ND	0.0150	1		mg/L
Cobalt	ND	0.00500	1		mg/L	Vanadium	0.00778	0.00500	1		mg/L
Copper	0.00949	0.00500	1		mg/L	Zinc	0.0735	0.0100	1		mg/L
Lead	ND	0.0100	1		mg/L						

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers



ANALYTICAL REPORT

Coast Environmental Services
9401 Gateshead Drive
Huntington Beach, CA 92646

Date Received: 03/22/00
Work Order No: 00-03-0795
Preparation: Total Digestion
Method: EPA 6010B / EPA 7470A

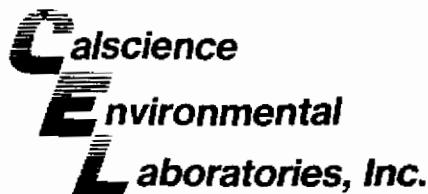
Project: Los Nietos Business Center

Page 2 of 3

Client Sample Number:		Lab Sample Number:		Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:			
MW-4		00-03-0795-4		03/22/00	Aqueous	03/23/00	03/24/00	000323lcs4			
Comment(s): Mercury was analyzed on 3/23/00 17:13:27 with batch 000323lcs2											
Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.0150	1		mg/L	Mercury	ND	0.00050	1		mg/L
Arsenic	ND	0.0150	1		mg/L	Molybdenum	ND	0.00500	1		mg/L
Barium	0.0447	0.0100	1		mg/L	Nickel	0.0180	0.0050	1		mg/L
Beryllium	ND	0.00100	1		mg/L	Selenium	ND	0.0150	1		mg/L
Cadmium	0.00954	0.00500	1		mg/L	Silver	ND	0.00500	1		mg/L
Chromium (Total)	0.261	0.005	1		mg/L	Thallium	ND	0.0150	1		mg/L
Cobalt	ND	0.00500	1		mg/L	Vanadium	ND	0.00500	1		mg/L
Copper	0.0244	0.0050	1		mg/L	Zinc	0.124	0.010	1		mg/L
Lead	ND	0.0100	1		mg/L						
MW-5		00-03-0795-5		03/22/00	Aqueous	03/23/00	03/24/00	000323lcs4			
Comment(s): Mercury was analyzed on 3/23/00 17:22:37 with batch 000323lcs2											
Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.0150	1		mg/L	Mercury	ND	0.00050	1		mg/L
Arsenic	ND	0.0150	1		mg/L	Molybdenum	ND	0.00500	1		mg/L
Barium	0.0521	0.0100	1		mg/L	Nickel	ND	0.00500	1		mg/L
Beryllium	ND	0.00100	1		mg/L	Selenium	ND	0.0150	1		mg/L
Cadmium	ND	0.00500	1		mg/L	Silver	ND	0.00500	1		mg/L
Chromium (Total)	0.0146	0.0050	1		mg/L	Thallium	ND	0.0150	1		mg/L
Cobalt	ND	0.00500	1		mg/L	Vanadium	ND	0.00500	1		mg/L
Copper	0.00557	0.00500	1		mg/L	Zinc	0.0331	0.0100	1		mg/L
Lead	ND	0.0100	1		mg/L						
MW-2		00-03-0795-6		03/22/00	Aqueous	03/23/00	03/24/00	000323lcs4			
Comment(s): Mercury was analyzed on 3/23/00 17:25:39 with batch 000323lcs2											
Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	0.0167	0.0150	1		mg/L	Mercury	0.00167	0.00050	1		mg/L
Arsenic	ND	0.0150	1		mg/L	Molybdenum	ND	0.00500	1		mg/L
Barium	0.0872	0.0100	1		mg/L	Nickel	0.00526	0.00500	1		mg/L
Beryllium	ND	0.00100	1		mg/L	Selenium	ND	0.0150	1		mg/L
Cadmium	ND	0.00500	1		mg/L	Silver	ND	0.00500	1		mg/L
Chromium (Total)	0.369	0.005	1		mg/L	Thallium	ND	0.0150	1		mg/L
Cobalt	ND	0.00500	1		mg/L	Vanadium	0.00917	0.00500	1		mg/L
Copper	0.00743	0.00500	1		mg/L	Zinc	0.0546	0.0100	1		mg/L
Lead	ND	0.0100	1		mg/L						
Method Blank		099-04-008-203		N/A	Aqueous	03/23/00	03/23/00	000323lcs2			
Parameter	Result	RL	DF	Qual	Units						
Mercury	ND	0.00050	1		mg/L						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501



ANALYTICAL REPORT

Coast Environmental Services
9401 Gateshead Drive
Huntington Beach, CA 92646

Date Received: 03/22/00
Work Order No: 00-03-0795
Preparation: Total Digestion
Method: EPA 6010B / EPA 7470A

Project: Los Nietos Business Center

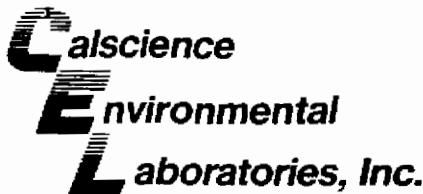
Page 3 of 3

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	097-01-003-1,163	NA	Aqueous	03/23/00	03/24/00	0003231cs4

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Antimony	ND	0.0150	1		mg/L	Molybdenum	ND	0.00500	1		mg/L
Arsenic	ND	0.0150	1		mg/L	Nickel	ND	0.00500	1		mg/L
Barium	ND	0.0100	1		mg/L	Selenium	ND	0.0150	1		mg/L
Beryllium	ND	0.00100	1		mg/L	Silver	ND	0.00500	1		mg/L
Cadmium	ND	0.00500	1		mg/L	Thallium	ND	0.0150	1		mg/L
Chromium (Total)	ND	0.00500	1		mg/L	Vanadium	ND	0.00500	1		mg/L
Cobalt	ND	0.00500	1		mg/L	Zinc	ND	0.0100	1		mg/L
Copper	ND	0.00500	1		mg/L	Lead	ND	0.0100	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501



ANALYTICAL REPORT

Coast Environmental Services
9401 Gateshead Drive
Huntington Beach, CA 92646

Date Received: 03/22/00
Work Order No: 00-03-0795
Preparation: N/A
Method: EPA 7196A

Project: Los Nietos Business Center

Page 1 of 1

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-6	00-03-0795-1	Aqueous	03/22/00	N/A	03/22/00	000322crl

Parameter	Result	RL	DF	Qual	Units
Chromium (VI)	ND	0.020	1		mg/L

MW-3	00-03-0795-2	Aqueous	03/22/00	N/A	03/22/00	000322crl
------	--------------	---------	----------	-----	----------	-----------

Parameter	Result	RL	DF	Qual	Units
Chromium (VI)	ND	0.020	1		mg/L

MW-1	00-03-0795-3	Aqueous	03/22/00	N/A	03/22/00	000322crl
------	--------------	---------	----------	-----	----------	-----------

Parameter	Result	RL	DF	Qual	Units
Chromium (VI)	ND	0.020	1		mg/L

MW-4	00-03-0795-4	Aqueous	03/22/00	N/A	03/22/00	000322crl
------	--------------	---------	----------	-----	----------	-----------

Parameter	Result	RL	DF	Qual	Units
Chromium (VI)	0.23	0.02	1		mg/L

MW-5	00-03-0795-5	Aqueous	03/22/00	N/A	03/22/00	000322crl
------	--------------	---------	----------	-----	----------	-----------

Parameter	Result	RL	DF	Qual	Units
Chromium (VI)	ND	0.020	1		mg/L

MW-2	00-03-0795-6	Aqueous	03/22/00	N/A	03/22/00	000322crl
------	--------------	---------	----------	-----	----------	-----------

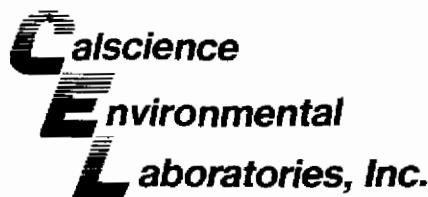
Parameter	Result	RL	DF	Qual	Units
Chromium (VI)	0.33	0.02	1		mg/L

Method Blank	099-05-001-389	Aqueous	N/A	N/A	03/22/00	000322crl
--------------	----------------	---------	-----	-----	----------	-----------

Parameter	Result	RL	DF	Qual	Units
Chromium (VI)	ND	0.020	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501



ANALYTICAL REPORT

Coast Environmental Services
9401 Gateshead Drive
Huntington Beach, CA 92646

Date Received: 03/22/00
Work Order No: 00-03-0795
Preparation: N/A
Method: EPA 8260B

Project: Los Nietos Business Center

Page 1 of 8

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-6	00-03-0795-1	03/22/00	Aqueous	N/A	03/24/00	000323AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromoform	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	69	1	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	9.5	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	2.1	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	97	86-118		Toluene-d8	98	88-110	
1,4-Bromofluorobenzene	92	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

ANALYTICAL REPORT

Coast Environmental Services
 9401 Gateshead Drive
 Huntington Beach, CA 92646

Date Received: 03/22/00
 Work Order No: 00-03-0795
 Preparation: N/A
 Method: EPA 8260B

Project: Los Nietos Business Center

Page 2 of 8

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-3	00-03-0795-2	03/22/00	Aqueous	N/A	03/24/00	000323AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromoform	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromoform	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromomethane	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	Styrene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Tetrachloroethene	1.6	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichloroethene	3.5	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,1-Dichloroethane	1.6	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	1.7	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L						
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	99	86-118		Toluene-d8	97	86-110	
1,4-Bromofluorobenzene	91	86-115					

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

ANALYTICAL REPORT

Coast Environmental Services
 9401 Gateshead Drive
 Huntington Beach, CA 92646

Date Received: 03/22/00
 Work Order No: 00-03-0795
 Preparation: N/A
 Method: EPA 8260B

Project: Los Nietos Business Center

Page 3 of 8

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-1	00-03-0795-3	03/22/00	Aqueous	N/A	03/24/00	000323AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromoform	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromoform	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromomethane	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Tetrachloride	0.59	0.50	1		ug/L	Styrene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	1.7	1.0	1		ug/L	Tetrachloroethene	6.3	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,1-Trichloroethane	3.2	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichloroethene	24	1	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,1-Dichloroethane	7.4	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,2-Dichloroethane	0.53	0.50	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	81	1	1		ug/L	o-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	1.7	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L						
1,2-Dichloropropane	29	1	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	100	86-118		Toluene-d8	98	88-110	
1,4-Bromofluorobenzene	92	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

ANALYTICAL REPORT

Coast Environmental Services
 9401 Gateshead Drive
 Huntington Beach, CA 92646

Date Received: 03/22/00
 Work Order No: 00-03-0795
 Preparation: N/A
 Method: EPA 8260B

Project: Los Nietos Business Center

Page 4 of 8

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-4	00-03-0795-4	03/22/00	Aqueous	N/A	03/24/00	000323AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromoform	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromoform	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromomethane	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Tetrachloride	0.58	0.50	1		ug/L	Styrene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	4.8	1.0	1		ug/L	Tetrachloroethene	8.1	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichloroethene	12	1	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,1-Dichloroethane	3.5	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,2-Dichloroethane	1.8	0.5	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	3.6	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L						
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	115	86-118		Toluene-d8	109	88-110	
1,4-Bromofluorobenzene	103	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

ANALYTICAL REPORT

Coast Environmental Services
9401 Gateshead Drive
Huntington Beach, CA 92646

Date Received: 03/22/00
Work Order No: 00-03-0795
Preparation: N/A
Method: EPA 8260B

Project: Los Nietos Business Center

Page 5 of 8

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-5	00-03-0795-5	03/22/00	Aqueous	N/A	03/24/00	000323BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	91	1	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	7.0	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	2.3	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	101	86-118		Toluene-d8	96	88-110	
1,4-Bromofluorobenzene	90	86-115					

ANALYTICAL REPORT

Coast Environmental Services
 9401 Gateshead Drive
 Huntington Beach, CA 92646

Date Received: 03/22/00
 Work Order No: 00-03-0795
 Preparation: N/A
 Method: EPA 8260B

Project: Los Nietos Business Center

Page 6 of 8

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-2	00-03-0795-8	03/22/00	Aqueous	N/A	03/24/00	000323BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromoform	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	2-Hexanone	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Tetrachloride	2.2	0.5	1		ug/L	Naphthalene	ND	10	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroform	11	1	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Tetrachloroethene	15	1	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichloroethene	16	1	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	4.9	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,2-Dichloroethane	4.1	0.5	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,1-Dichloroethene	2.9	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
c-1,2-Dichloroethene	1.2	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	103	86-118		Toluene-d8	101	88-110	
1,4-Bromofluorobenzene	94	86-115					

ANALYTICAL REPORT

Coast Environmental Services
 9401 Gateshead Drive
 Huntington Beach, CA 92646

Date Received: 03/22/00
 Work Order No: 00-03-0795
 Preparation: N/A
 Method: EPA 8260B

Project: Los Nietos Business Center

Page 7 of 8

Client Sample Number:	Lab Sample Number:		Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:				
Method Blank	095-01-026-1,929		N/A	Aqueous	N/A	03/23/00	000323AW				
Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromoform	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromomethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	2-Hexanone	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	Naphthalene	ND	10	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual				
Dibromofluoromethane	96	86-118		Toluene-d8	93	88-110					
1,4-Bromofluorobenzene	88	86-115									

RL - Reporting Limit

DF - Dilution Factor

Qual - Qualifiers



ANALYTICAL REPORT

Coast Environmental Services
9401 Gateshead Drive
Huntington Beach, CA 92646

Date Received: 03/22/00
Work Order No: 00-03-0795
Preparation: N/A
Method: EPA 8260B

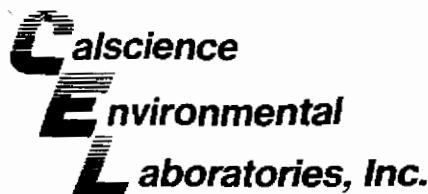
Project: Los Nietos Business Center

Page 8 of 8

Client Sample Number:	Lab Sample Number:		Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:				
Method Blank	095-01-026-1,930		N/A	Aqueous	N/A	03/24/00	000323BW				
Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromoform	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromoform	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromomethane	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	Styrene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						
Surrogates:	REC (%)	Control Limits		Qual		Surrogates:	REC (%)	Control Limits		Qual	
Dibromofluoromethane	98	86-118				Toluene-d8	93	88-110			
1,4-Bromofluorobenzene	88	86-115									

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501



Quality Control - Spike/Spike Duplicate

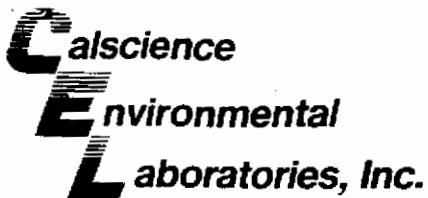
Coast Environmental Services
9401 Gateshead Drive
Huntington Beach, CA 92646

Date Received: 03/22/00
Work Order No: 00-03-0795
Preparation: Total Digestion
Method: EPA 6010B

Project: Los Nietos Business Center

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-03-0750-1	Aqueous	ICP 2000	03/23/00	03/24/00	032300ms4

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	133	124	80-120	7	0-20	3
Arsenic	116	109	80-120	6	0-20	
Barium	98	94	80-120	4	0-20	
Beryllium	104	97	80-120	7	0-20	
Cadmium	98	91	80-120	7	0-20	
Chromium (Total)	103	96	80-120	7	0-20	
Cobalt	94	88	80-120	7	0-20	
Copper	123	113	80-120	8	0-20	3
Lead	94	88	80-120	7	0-20	
Molybdenum	103	96	80-120	7	0-20	
Nickel	95	88	80-120	7	0-20	
Selenium	116	107	80-120	8	0-20	
Silver	125	119	80-120	5	0-20	3
Thallium	93	88	80-120	6	0-20	
Vanadium	109	101	80-120	7	0-20	
Zinc	115	117	80-120	2	0-20	



Quality Control - Spike/Spike Duplicate

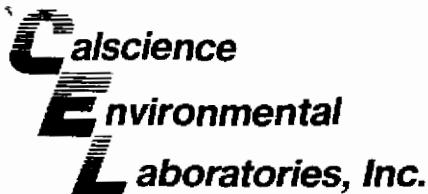
Coast Environmental Services
9401 Gateshead Drive
Huntington Beach, CA 92646

Date Received: 03/22/00
Work Order No: 00-03-0795
Preparation: Total Digestion
Method: EPA 7470A

Project: Los Nietos Business Center

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-3	Aqueous	Mercury	03/23/00	03/23/00	032300ms2

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	98	100	71-134	2	0-14	



Quality Control - Spike/Spike Duplicate

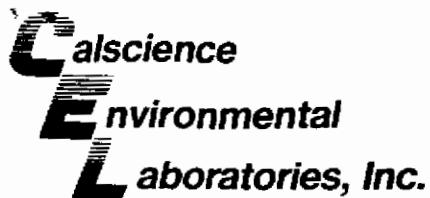
Coast Environmental Services
9401 Gateshead Drive
Huntington Beach, CA 92646

Date Received: 03/22/00
Work Order No: 00-03-0795
Preparation: N/A
Method: EPA 7196A

Project: Los Nietos Business Center

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-6	Aqueous	8483	N/A	03/22/00	000322crf

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Chromium (VI)	102	102	70-130	0	0-25	



Quality Control - Spike/Spike Duplicate

Coast Environmental Services
9401 Gateshead Drive
Huntington Beach, CA 92646

Date Received: 03/22/00
Work Order No: 00-03-0795
Preparation: N/A
Method: EPA 8260B

Project: Los Nietos Business Center

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-2	Aqueous	GC/MS L	N/A	03/24/00	00030795-6

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	93	97	72-127	4	0-25	
Carbon Tetrachloride	92	95	70-130	4	0-25	
Chlorobenzene	92	96	72-131	4	0-25	
1,2-Dichlorobenzene	92	96	70-130	3	0-25	
1,1-Dichloroethene	115	119	69-127	3	0-25	
Toluene	94	98	75-124	5	0-25	
Trichloroethene	90	98	60-137	6	0-25	
Vinyl Chloride	89	93	70-130	5	0-25	
Methyl-tert-Butyl Ether	96	99	80-120	2	0-25	



Environmental Quality Contr I - Laboratory Control Sample

Laboratories, Inc.

Coast Environmental Services
9401 Gateshead Drive
Huntington Beach, CA 92646

Date Received: 03/22/00
Work Order No: 00-03-0795
Preparation: Total Digestion
Method: EPA 6010B

Project: Los Nietos Business Center

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-003-1,163	Aqueous	ICP 2000	03/24/00	000323-1	000323lcs4

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Antimony	1.00	0.984	98	80-120	
Arsenic	1.00	0.869	87	80-120	
Barium	1.00	1.04	104	80-120	
Beryllium	1.00	1.01	101	80-120	
Cadmium	1.00	1.04	104	80-120	
Chromium (Total)	1.00	1.02	102	80-120	
Cobalt	1.00	1.04	104	80-120	
Copper	1.00	1.02	102	80-120	
Lead	1.00	1.02	102	80-120	
Molybdenum	1.00	1.02	102	80-120	
Nickel	1.00	1.05	105	80-120	
Selenium	1.00	0.972	97	80-120	
Silver	0.500	0.506	101	80-120	
Thallium	1.00	1.12	112	80-120	
Vanadium	1.00	1.02	102	80-120	
Zinc	1.00	1.05	105	80-120	



Environmental Quality Control - Laboratory Control Sample
Laboratories, Inc.

Coast Environmental Services
9401 Gateshead Drive
Huntington Beach, CA 92646

Date Received: 03/22/00
Work Order No: 00-03-0795
Preparation:
Method:

Total Digestion
EPA 7470A

Project: Los Nietos Business Center

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-04-008-203	Aqueous	Mercury	03/23/00	000323LC	000323lc2

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Mercury	0.0100	0.0110	110	90-122	

 **calscience****E nvironmental Quality Control - Laboratory Control Sample
Laboratories, Inc.**

Coast Environmental Services
9401 Gateshead Drive
Huntington Beach, CA 92646

Date Received: 03/22/00
Work Order No: 00-03-0795
Preparation: N/A
Method: EPA 7196A

Project: Los Nietos Business Center

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-05-001-389	Aqueous	8453	03/22/00		000322cr1

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Chromium (VI)	0.500	0.509	102	80-120	



Environmental Quality Control - Laboratory Control Sample
Laboratories, Inc.

Coast Environmental Services
9401 Gateshead Drive
Huntington Beach, CA 92646

Date Received: 03/22/00
Work Order No: 00-03-0795
Preparation: N/A
Method: EPA 8260B

Project: Los Nietos Business Center

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
095-01-026-1,929	Aqueous	GC/MS L	03/23/00	123MAR003	000323AW

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Benzene	50	47.4	95	72-127	
Carbon Tetrachloride	50	46.1	92	70-130	
Chlorobenzene	50	46.5	93	72-131	
1,2-Dichlorobenzene	50	45.6	91	70-130	
1,1-Dichloroethene	50	46.5	93	69-127	
Toluene	50	46.7	93	75-124	
Trichloroethene	50	45.8	92	60-137	
Vinyl Chloride	50	48.7	97	79-118	
Methyl-tert-Butyl Ether	50	48.3	97	80-120	

Calscience**E**nvironmental Quality Control - Laboratory Control Sample
Laboratories, Inc.

Coast Environmental Services
9401 Gateshead Drive
Huntington Beach, CA 92646

Date Received: 03/22/00
Work Order No: 00-03-0795
Preparation: N/A
Method: EPA 8260B

Project: Los Nietos Business Center

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
095-01-026-1,930	Aqueous	GC/MS L	03/24/00	23MAR029	000323BW

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Benzene	50	45.1	90	72-127	
Carbon Tetrachloride	50	43.0	86	70-130	
Chlorobenzene	50	44.0	88	72-131	
1,2-Dichlorobenzene	50	43.6	87	70-130	
1,1-Dichloroethene	50	44.2	88	69-127	
Toluene	50	44.6	89	75-124	
Trichloroethene	50	43.7	87	60-137	
Vinyl Chloride	50	43.0	86	79-118	
Methyl-tert-Butyl Ether	50	45.9	92	80-120	



GLOSSARY OF TERMS AND QUALIFIERS

Work Order Number: 00-03-0795

<u>Qualifier</u>	<u>Definition</u>
3	Spike or Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
ND	Not detected at indicated reporting limit.

CALSCIENCE ENVIRONMENTAL
LABORATORIES, INC.

7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date 3/22/00

Page 1 of 1

LABORATORY CLIENT: <i>Coast Environmental Services</i>						CLIENT PROJECT NAME / NUMBER: <i>Los Nietos Business Center</i>						P.O. NO.:																										
ADDRESS: <i>9401 Gateshead Drive</i>						PROJECT CONTACT: <i>Kevin Sheridan</i>						QUOTE NO.:																										
CITY <i>Huntington Beach</i>		STATE <i>CA</i>		ZIP <i>92646</i>		<i>Kevin Sheridan</i>						LAB USE ONLY <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																										
TEL: <i>714 962-4675</i>		FAX: <i>714 378-1195</i>		E-MAIL:																																		
TURNAROUND TIME <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> 5 DAYS <input type="checkbox"/> 10 DAYS												REQUESTED ANALYSES																										
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) <input type="checkbox"/> RWQCB REPORTING <input type="checkbox"/> ARCHIVE SAMPLES UNTIL <u>/</u> <u>/</u> <u>/</u>																																						
SPECIAL INSTRUCTIONS <i>- Filter and Preserve T22 Metals Samples + Analyze Cr⁶⁺ Samples within 24 hrs</i>																																						
LAB USE ONLY	SAMPLE ID	LOCATION/DESCRIPTION	SAMPLING		MATRIX	NO. OF CONT.	TPH (G)		TPH (D) (O)		BTTEX / MTBE (8021B)		HALOCARBONS (8021B)		VOCs (8260B)		SVOCs (8270C)		PEST (8081A)		PCBs (8082)		EDB / DBCP (504.1) or (8011)		CAC, T22 METALS (6010B)		ICP/MS METALS (6020)		PNAS (8310)		VOCs (TO-14A) or (TO-15)		CH ₄ / TGNM0 (25.1)		FIXED GASES (25.1) or (D1946)		<i>Hexavalent Chromium</i>	
			DATE	TIME																																		
	MW2	Monitoring Well #6	3/22	2:50	Water	5	X					X			X											X												
	MW3		#3	3:05			X					X			X																							
	MW1		#1	3:20			X					X			X																							
	MW4		#4	3:35			X					X			X																							
	MW5		#5	3:45			X					X			X																							
	MW2		#2	4:00			X					X			X																							
Relinquished by: (Signature)							Received by: (Signature)							Date: <u>3/22/00</u>		Time: <u>5:37</u>																						
Relinquished by: (Signature)							Received by: (Signature)							Date: _____		Time: _____																						
Relinquished by: (Signature)							Received for Laboratory by: (Signature)							Date: <u>3/22/00</u>		Time: <u>1737</u>																						

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.

Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Yellow and Pink copies respectively.

02/01/99 Revision